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(54) EXHAUST GAS EMISSION CONTROL DEVICE
 FOR INTERNAL COMBUSTION ENGINE AND
 EXHAUST GAS EMISSION CONTROL
 METHOD

reduction purified by HC concentration fluctuation.

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(57) Abstract:

PROBLEM TO BE SOLVED: To eliminate PM (particulates) as well as to treat NOx at high efficiency under an oxygen excessive environment of a diesel engine.

SOLUTION: Oxidizing catalyst 4 is disposed in an upstream casing 2a, and a hollow cylindrical DPF 50 whose one end is closed for collecting PM is disposed in a downstream casing 2b. The oxidizing catalyst 4 has a HC adsorbing catalyst, a function for generating NO₂ by oxidizing NO, and an absorbing performance of HC. The DPF 50 is composed of an inner layer part 51 and an outer layer part 52, the inner layer part 51 has a HC adsorbing catalyst, and the outer layer part 52 has a reduction component concentration fluctuating type NOx catalyst. The PM of the DPF 50 is eliminated by NO₂ generated by the oxygen catalyst in association with temperature change during operation, and NOx of the outer layer part 52 is discharge

